

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/815,687	04/02/2004	Kiyoko Oshima	43888-311	9764	
7590 11/20/2006 McDERMOTT, WILL & EMERY			EXAMINER		
			LIN, JACK		
600 13th Street, N.W. WASHINGTON, DC 20005-3096		ART UNIT	PAPER NUMBER		
			3768	3768	
		DATE MAILED: 11/20/2006			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/815,687	OSHIMA ET AL.			
		Examiner	Art Unit			
		Jack Lin	3768			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)🖂	Responsive to communication(s) filed on 10/23	3/2006.	•			
·	<u> </u>	action is non-final.				
· <u>-</u>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
٠,٣	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
_	☑ Claim(s) <u>1-15</u> is/are pending in the application.					
-	4a) Of the above claim(s) is/are withdrawn from consideration.					
	Claim(s) is/are allowed.					
·	Claim(s) 1,8,13 and 15 is/are rejected.					
	Claim(s) <u>2-7, 9-12, and 14</u> is/are objected to.					
· —	☐ Claim(s) are subject to restriction and/or election requirement.					
	ion Papers					
_						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on <u>02 April 2004</u> is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
See the attached detailed Office action for a list of the certified copies not received.						
Attachmen	` t(s)					
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notic	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite			
	mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	5) Notice of Informal P. 6) Other:	atent Appliçation			

Application/Control Number: 10/815,687 Page 2

Art Unit: 3768

#### **DETAILED ACTION**

1. This action is in response to applicant's amendments received on October 23, 2006.

- 2. The rejection of claims 1-9 under 35 USC 101 is withdrawn in light of applicant's amendment to claim 1.
- 3. The rejection of claim 10 under 35 USC 101 is withdrawn in light of applicant's amendment to claim 10.
- 4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### Claim Objections

5. Claims 10-12 are objected to because of the following informalities:

Regarding claim 10, "memorizes a first calibration" in line 9 is repeated twice.

Regarding claims 11 and 12, the parentheses in "line(s)" in line 3 appear unnecessary and should be deleted.

Appropriate correction is required.

#### Claim Rejections - 35 USC § 112

- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 7. Claims 13 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. The amendment to claim 10 appears to have incorporated claim 13 into

part (d)(2) and (3). Therefore, claim 13 is not further limiting claim 10.

## Claim Rejections - 35 USC § 102

8. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Robinson et al. (US Patent 6,152,876). Robinson et al. discloses the same invention including introducing light into an optical element (column 13, lines 28-30), detecting the light (column 13, lines 36-41), correcting the signal with a calibration line and obtaining the concentration of a component (column 16, lines 33-39), and outputting the concentration (column 17, lines 44-45). Regarding claim 8, Robinson et al. discloses a change in state of the interface is a change in the thickness of a fluid layer (column 14, lines 31-47).

#### Response to Arguments

Regarding the rejection of claims 1 and 8 under 35 U.S.C. 102(b) as being anticipated by Robinson et al., applicant's arguments have been fully considered but they are not persuasive. Applicant argues that Robinson et al. does not anticipate claim 1 because Robinson et al. discloses preventing errors prior to obtaining a wavenumber signal whereas claim 1 employ a calibration line to correct errors after obtaining a wavenumber signal. While applicant is correct in pointing to Robinson et al. at column 14, lines 49-51 to show one embodiment where errors are prevented by leveling tissue height before obtaining a wavenumber signal, as stated in the previous office action, Robinson et al. also discloses correcting the influence of a change in the state of an interface as a function of the tissue height above the sample, that is, the function is

Art Unit: 3768

dependent on the thickness of a fluid layer (column 14, lines 42-47). Therefore, the rejection of claims 1 and 8 is maintained.

### Allowable Subject Matter

- 10. Claims 2-7 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 11. Claims 10-12 and 14 are allowed.

As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

- 12. Claims 13 and 15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 13. The following is a statement of reasons for the indication of allowable subject matter:
  Regarding claims 2-7 and 9, the prior art does not teach or suggest a method for measuring the
  concentration of a specific component comprising the steps of preparing a calibration line by
  obtaining "i" different spectrums corresponding to "i" different states of interface and plotting
  "i" different points in a coordinate system where each of the "i" different points being
  determined from "j" different wavenumber signals corresponding to "j" different wavenumbers
  in each of the "i" different spectrums in combination with the other claimed elements.

  Regarding claims 10-15, the prior art does not teach or suggest a device for measuring the

Art Unit: 3768

concentration of a specific component comprising a signal processor that corrects a wavenumber signal based on a second calibration line having the same inclination as a first calibration line in combination with the other claimed elements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack Lin whose telephone number is (571) 272-7694. The examiner can normally be reached on Monday-Friday, 8:00 a.m. - 4:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader can be reached on (571) 272-4740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JL Art Unit 3768

